

41-N

August 6, 1999

Subject: Wiley Davis Road Landfill - Private Well Data

SCANNED
6/20/14
GZ

Phil,

I have private well sample data in some degree or another for 35 wells. I do not know if I have a complete data package for all of the sampling that was done. There is data for both organic and inorganic analyses for some wells but for others there is only one or the other.

The following are my comments to the statements you highlighted.

"Twenty-six (26) wells have shown some degree of contamination."

By my count, data from 27 wells have indicated the presence of one or more analytes at concentrations of trace amounts or greater. This includes organic and/or inorganic analytes. Apparently all of the metals detected, such as copper, iron, and zinc, were considered as **contaminants** in addition to the organics. The only traditional heavy metal reported was lead. One well had a concentration of 6 ppb.

"trace amounts of organic chemicals and/or metals were present."

The majority of analytes were reported as trace (<0.5 ppb) detections - less than the method detection limits. On several occasions the trip blanks also had the same detectable organics that were reported in the private well samples but apparently the trip blanks were disregarded. Of the wells with organics, only 9 wells had amounts that were quantified and most of these had lab qualifiers such as "actual value is known to be less than value given." Some of the reported trace values were given a lab qualifier about being possible lab contaminants, but again, these were ignored.

"some of the wells tested had five or more contaminants identified"

Five wells had 5 or more analytes reported at trace amounts or greater. Of those, only one well had more than one quantifiable organic and that was the new well with the new plastic plumbing that may be showing glue contaminants.

"the County Health Department did not take "simultaneous exposure" to multiple chemical compounds into account."

I assume this is a response to the County's statements about MCLs for drinking water for the individual analytes reported. None of the well samples had violations of established drinking water standards. Previous data for the "glue contaminated well" did indicate concentrations that exceeded MCLs. I do not know if the County consulted with Epidemiology about the results. I sent a summary of the data to LuAnne June 29th but I have not heard from her since then.

Certainly there can be a synergistic effect between 2 or more compounds.

"In the twenty-six (26) contaminated wells, eighteen (18) chemicals were identified. Five of these chemicals are known or suspected carcinogens."

The data I have reports the presence of 16 organics and 6 metals. Five organics are listed in EPA's Drinking Water Regulations and Health Advisories as possible or probable carcinogens. One metal is listed as a probable carcinogen.

It is important to note that we did not collect these samples and consequently do not know the details of the sampling events. We cannot verify QA/QC or chain-of-custody. There is evidence from notes made on the lab reports that the proper paperwork was not always submitted with the samples.

	✓ 4105 <u>Adams</u>	✓ 4107 <u>Adams</u>	✓ 4108 <u>Adams</u>	L 4106 <u>Adams</u>	L 4004 <u>old Adams</u>	✓ 4004 <u>New Adams</u>	✓ 4204 <u>W.D. Road</u>	✓ 4202 <u>W.D. Road</u>	✓ 4101 <u>Adams</u>	✓ 4103 <u>Adams</u>	✓ 4002 <u>Sedgewood</u>	✓ 4003 <u>Sedgewood</u>	✓ 4005 <u>Sedgewood</u>	✓ 4006 <u>Pennings</u>	✓ 4007 <u>Sedgewood</u>	✓ 4008 <u>Sedgewood</u>	✓ 4010 <u>Sedgewood</u>
MtBE	0.7	Tr ^c															
I, I-DCA	Tr		Tr	Tr		Tr ^a	Tr										
Chloroform ^{0.09}	Tr		Tr	Tr		#	Tr		Tr		1*	1.2	Tr.				
PCE ^{.5}	Tr	Tr	Tr	Tr		Tr ^b	Tr		Tr	Tr		Tr					Tr
TCE ^{5.0}		Tr	Tr	Tr													
Toluene ^{1.0}						0.7 ^d #											Tr
MEK						4.9 ^e #		1.5 ^f		1.6 ^j							
tetrahydrof. ^{0.7}						17.2 ^k #		Tr									
Ethylbenz. ^{0.1}						Tr ⁱ											
I, 4-DCB ^{0.075}						#											
I, 2-DCB ^{0.6}						#											
I, 1, 1-TCA ^{0.200}												Tr					
4-methyl-2-pentanone						Tr ^m											Tr
Styrene ^{0.1}						Tr ⁿ											Tr
2-hexanone ^{0.07}																	
C-1, 2-DCE			Tr														
Cu	, .05						.11	.13									
Fe							10.2	.14									
Mg	17.3	19					17.9	6.8									
Mn							.33										
✓ Pb							.006										
Z							.05										

* = no inorganic data * *

ppb

[illegible]

	4000 S. Fremont Dr	4113 Groomtown Rd	4119 Groomtown Rd	4201 S. Fremont
Fe		.9	.45	
Mg	.3	4.1	1.2	16.5
Mn		.05		
Z		.17		.09

No organic data for these wells